



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,304	03/29/2001	Alain Brochez	BROC3001/JEK	6723
7590 Bacon & Thomas 4th Floor 625 Slaters Lane Alexandria, VA 22314			EXAMINER GARCIA, ERNESTO	
			ART UNIT 3679	PAPER NUMBER
			MAIL DATE 10/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/806,304	Applicant(s) BROCHEZ, ALAIN	
	Examiner Ernesto Garcia	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 54-57, 59 and 62-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 54-57 and 62-65 is/are rejected.
- 7) ☒ Claim(s) 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office.

Claim Objections

Claims 54 and 66 are objected to because of the following informalities:

regarding claim 54, --side-- should be inserted before “members” in line 15; and,

regarding claim 63, “the outer surface” in lines 9-10 should be --the outer wall--.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the positioning element include elastic press-on element provided to push the inner sides of the insert parts against an inner surface of the respective attachment channel (claim 63, lines 4-7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Note that the flaps and the guiding elements are shown but not the press-on elements.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: “a clearance is defined between the outer wall of the respective attachment channel and the insert parts” recited in claim 62, lines 3-4, and “a clearance generally defined at an inside corner where the insert parts connect and having a hook-shaped profile” recited in claim 64, lines 2-3.

Claim Rejections - 35 USC § 112

Claim 62 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 62, the recitation “said insert part including a locking part arranged to lock with an outer wall of the respective channel” in lines 1-2 is not supported by the written description requirement. Note that the specification does not convey what is the locking part in the insert part. According to Figure 6, features 43 and

45, cannot possibly be the locking part since these have been described as positioning elements. Feature 23 is also not a locking part since this has been described as a stop part. Accordingly, the specification has no support for the outer wall locking with a locking part of the insert part.

Claims 55-57, 59, and 62-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 55, the recitation "a panel" in lines 16-17 makes unclear whether this is another panel or the same panel recited in line 15. Further, the recitation "an extension thereof" is misdescriptive and/or inaccurate since the first leg does not have an extension that intersects the edge of the panel. According to Figure 1, the first leg 26 extends to the wall of the channel thus it intersects the wall of the channel at best.

Regarding claim 56, the recitation "the end portion and the element of each of said insert parts arranged so that the end portion places the element in tension when inserted into the respective attachment channel" in lines 17-19 makes unclear how the end portion and the element are arranged to place the element in tension. Further, what provides the tension? Is there a force that pulls on the end portion and the element?

Regarding claim 59, the recitation "at least one notch" in 11 makes unclear whether this is another notch than the notches recited in line 9, or one of those notches recited in line 9. Also, to which notches does "said notches" in line 11 refer? Should it be --said at least one notch--?

Regarding claim 63, the recitation "the corner part" in line 11 lacks proper antecedent basis.

Regarding claims 57 and 62-65, the claims depend from claim 56 and therefore are indefinite.

Claim Rejections - 35 USC § 103

Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz, EP-835,978, in view of Rhodes, EP-412,669.

Regarding claim 54, Schulz discloses, in Figure 1, a corner joint comprising two frame side members **1,2**, at least one corner piece **3**, and a panel (note that the English abstract recites a window, thus there is a panel). The frame side members **1,2** have an attachment channel **A1** (see marked-up attachment provided in the last Office action) and mitered end portions **A2**. The at least one corner piece **3** has two insert parts **A3** joined at connecting ends to define a corner portion and positioned relative to one

another at a predetermined angle (90 degrees). Each insert part **A3** is configured to be received by the mitered end portions of a respective one of the attachment channels **A1**. Each of the insert parts **A3** includes an end portion geometrically configured in the shape of a triangle having an apex **A4** directed along a longitudinal axis of the respective attachment channel **A1**. Each insert part **A3** defines a second leg **A5** arranged to be urged against an inner wall **A6** of the respective attachment channel **A1**, a first leg **A7** connecting at a first end with a first end of the second leg **A5** forming the apex **A4** and extending at an oblique angle relative to the second leg **A5** in a direction generally proximal to the corner portion, and a third leg **A8** extending obliquely relative to the second leg **A5** in a direction generally proximal to the corner portion and connecting to the second leg **A5**. The panel is retained by the frame side members **1,2**. However, Schulz, as discussed, does not disclose the panel retained by wedges. Rhodes teaches, in Figure 1-3, retaining a panel with the use of wedges 46, 48 to wedge the panel between frame side members without rattle. Therefore, as taught by Rhodes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wedge members to retain the panel of Schulz between the frame side members thus preventing rattle of the panel.

Regarding claim 55, Schulz discloses, in Figure 1, a corner joint comprising two frame side members **1,2**, at least one corner piece 3, and a panel (note that the English abstract recites a window, thus there is a panel). The frame side members **1,2** have an attachment channel **A1** (see marked-up attachment provided in the last Office action)

and mitered end portions **A2**. The at least one corner piece **3** has two insert parts **A3** joined at connecting ends to define a corner portion and positioned relative to one another at a predetermined angle (90 degrees). Each insert part **A3** is configured to be received by the mitered end portions of a respective one of the attachment channels **A1**. Each of the insert parts **A3** includes an end portion geometrically configured in the shape of a triangle having an apex **A4** directed along a longitudinal axis of the respective attachment channel **A1**. Each insert part **A3** defines a second leg **A5** arranged to be urged against an inner wall **A6** of the respective attachment channel **A1**, a first leg **A7** connecting at a first end with a first end of the second leg **A5** forming the apex **A4** and extending at an oblique angle relative to the second leg **A5** in a direction generally proximal to the corner portion, and a third leg **A8** extending obliquely relative to the second leg **A5** in a direction generally proximal to the corner portion and connecting to the second leg **A5**. The frame side members **1,2** retain the panel. However, Schulz, as discussed, does not disclose the panel retained by wedges nor is the first leg directed such that an intersection of an extension of the first leg with an edge of the panel is situated a distance near 10cm from a corner of the panel. Rhodes teaches, in Figure 1-3, retaining a panel with the use of wedges 46, 48 to wedge the panel between frame side members without rattle. Therefore, as taught by Rhodes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wedge members to retain the panel of Schulz between the frame side members thus preventing rattle of the panel. With respect to the distance, applicant is reminded that a change in size is an obvious modification. One can simply make the

first leg be directed such that an intersection of an extension of the first leg with an edge of the panel is situated a distance near 10cm from a corner of the panel.

Claims 56, 57, 62, 63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, 3,627,359, in view of Schulz, EP-835,978.

Regarding claim 56, Paul discloses, in Figures 1 and 5, a corner joint comprising two frame side members **14,18**, and at least one corner piece **20**. The frame side members **14,18** have an attachment channel **54** and mitered end portions. The at least one corner piece **20** has two insert parts **24,26** joined at connecting ends to define a corner portion and positioned relative to one another at a predetermined angle (90 degrees). Each insert part **24,26** is configured to be received by the mitered end portions of a respective one of the attachment channels **54**. Each of the insert parts **24,26** includes an end portion **28** geometrically configured in the shape of a triangle having an apex **A4** directed along a longitudinal axis of the respective attachment channel **54**. Each insert part **24,26** defines a second leg **34** arranged to be urged against an inner wall **52** of the respective attachment channel **54**, and a first leg **30** connecting at a first end with a first end of the second leg **34** forming the apex **A4** and extending at an oblique angle relative to the second leg **34** in a direction generally proximal to the corner portion. Each of the insert parts **24,26** includes an element comprising the second leg **34** and a connecting leg **38** situated in an extension of the second leg. The end portion and the element of each of the insert parts are arranged.

However, Paul, fails to disclose a third leg extending obliquely relative to the second leg 30 in a direction generally proximal to the corner portion and connecting to the second leg 30. Note that since the triangle does not have an opening, it would have been obvious to provide the triangle with an opening A5 as taught in Schulz between Figures 1 and 5 to make the corner piece lightweight and save in material costs. Given that the triangle will be hollow due to the opening as modified by Paul, a third leg A3 would have extended obliquely relative to the second leg in a direction generally proximal to the corner portion and connecting to the second leg (see attachment). Therefore, as taught by Paul, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the corner piece light weight by providing an opening in the triangle thus providing for a third leg extending obliquely relative to the second leg to save material.

Regarding claim 57, given the modification, the elements would have been arranged to be positioned generally along the inner surface of the attachment channels.

Regarding claim 62, the insert part includes a locking part 32. A clearance 36 is defined between an outer wall of the attachment channel and the insert parts.

Regarding claim 63, the corner piece is provided with positioning elements 44,46 including elastic press-on elements provided to push inner sides of the insert parts against an inner surface of the attachment channels.

Regarding claim 65, the insert parts connect.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, 3,627,359, in view of Schulz, EP-835,978, as applied to claim 56 above, and further in view of Paulsen, 5,378,077.

Regarding claim 64, Paul, as modified, fails to disclose the corner piece includes a clearance generally defined at an inside corner where the insert parts connect and have a hook-shaped profile. Paulsen teaches, in Figures 8 and 9, a clearance 19 generally defined at an inside corner where insert parts connect and have a hook-shaped profile to act as indicator that frame side member are under tension. Therefore, as taught by Paulsen, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a clearance generally defined at the inside corner where the insert part connect and have a hook-shaped profile to place the frame side members in tension.

Allowable Subject Matter

Claim 59 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 59, the prior art of record does not disclose or suggest a corner joint comprising a side of each notch over which a free end of a lip projection is pressed in having a buckled shaped. The closes prior art, Ronnlund, EP-549,554, the French patent, FR-2,234,062, Bucci, 4,192,624, and the German patent, DE-19,700,604, disclose a notch without a buckled shape. There is no motivation, absent applicant's own disclosure, to modify the notch. Accordingly, the buckled shape realizes an efficient press-on effect.

Response to Arguments

With respect to Schulz, applicant argues that the elements labeled A5, A7, A8 form a trapezoidal or other irregularly shaped polygonal and thus these elements do not form a triangular shape. In response, it should be noted that the elements form a three-sided polygonal and such forms a triangle since all three sided-polygonals inherently form a triangle. With respect to the element labeled A4, applicant argues that this does not form the apex of a triangle, but rather forms an additional side to the geometric shape. In response, it should be noted that reference character A4 does not depict a side but rather a point of reference to the apex. Applicant further argues that A8 does not connect to element A5. This is not found persuasive because the leg A5 runs from corner to corner of the triangle. The fact that another feature 5 intersects the leg does

Art Unit: 3679

not mean that the leg is only half of the leg identified A5. Applicant further argues that Schulz fails to disclose "a third leg extending obliquely relative to the second leg in a direction generally proximal to the corner portion and connecting to the second leg". In response, the argument is not found persuasive because the rejection makes clear how the third leg is present in Schulz and how it connects to the second leg accordingly.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 3679

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

EP.

E.G.

October 15, 2007

Attachment: one marked-up page of Paul, 3,627,359, as modified by Schulz

Daniel P Stodola

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Paul, 3,627,359

